

H1418

0055818

Lionville Laboratory, Inc.  
VOA ANALYTICAL DATA PACKAGE FOR  
TNUHANFORD B01-059 H1418

DATE RECEIVED: 07/10/01

LVL LOT # :0107L261

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B12BX1	001	W	01LVN145	07/10/01	N/A	07/17/01
B12BX1	001 MS	W	01LVN145	07/10/01	N/A	07/17/01
B12BX1	001 MSD	W	01LVN145	07/10/01	N/A	07/17/01

LAB QC:

VBLKGT	MB1	W	01LVN145	N/A	N/A	07/17/01
VBLKGT	MB1 BS	W	01LVN145	N/A	N/A	07/17/01

RECEIVED  
NOV 06 2001

EDMC





**Client:** TNU-HANFORD B01-059  
**RFW #:** 0107L261  
**SDG/SAF #:** H1418/B01-059

**W.O. #:** 11343-606-001-9999-00  
**Date Received:** 07-10-2001

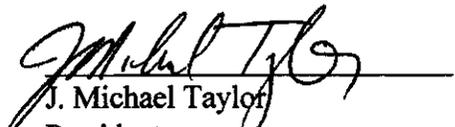
### GC/MS VOLATILE

One (1) water sample was collected on 07-10-2001.

The sample and its associated QC samples were analyzed according to criteria set forth in Lionville Laboratory OPs based on SW 846 Method 8260A for TCL Volatile target compounds on 07-17-2001.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. The cooler temperature upon receipt has been recorded on the chain-of-custody.
2. The sample was analyzed within required holding time.
3. Non-target compounds were not detected in the sample.
4. All surrogate recoveries were within EPA QC limits.
5. All matrix spike recoveries were within EPA QC limits.
6. All blank spike recoveries were within EPA QC limits.
7. The method blank contained the common laboratory contaminants Methylene Chloride and Acetone at levels less than 2x the CRQL.
8. Internal standard area and retention time criteria were met.
9. "I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

  
J. Michael Taylor  
President  
Lionville Laboratory Incorporated

7/27/01  
Date

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The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 9 pages.

## GLOSSARY OF VOA DATA

### DATA QUALIFIERS

- U** - Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** - Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** - Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** - Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** - Interference.
- NQ** - Result qualitatively confirmed but not able to quantify.
- N** - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** - This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** - Additional qualifiers used as required are explained in the case narrative.

## GLOSSARY OF VOA DATA

### ABBREVIATIONS

- BS** - Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD** - Indicates blank spike duplicate.
- MS** - Indicates matrix spike.
- MSD** - Indicates matrix spike duplicate.
- DL** - Suffix added to sample number to indicate that results are from a diluted analysis.
- NA** - Not Applicable.
- DF** - Dilution Factor.
- NR** - Not Required.
- SP, Z** - Indicates Spiked Compound.

## TECHNICAL FLAGS FOR MANUAL INTEGRATION

Manual quantitation modifications or integrations are performed routinely to improve the data quality for a variety of technical reasons. Documentation of these modifications should be clear and concise. The following "flags" are used to indicate the technical reasons for quantitation modifications:

- MP** - **Missed Peak:** manually added peak not found by automatic quantitation program.
- PA** - **Peak Assignment:** quantitation report was changed to reflect correct peak assignment.
- RI** - **Routine Integration:** routine integrations are performed for some analytes that are consistently integrated improperly by the automatic integration programs. Examples are the dichlorobenzene isomers on the VOA packed column and benzo(b)fluoranthene/benzo(k)fluoranthene which are poorly resolved on the BNA column.
- SP** - **Split Peak:** the automatic integration improperly split the peak; a manual integration was performed to get the correct area.
- CB** - **Coelution/Background:** peak was manually integrated to eliminate contribution from coeluting compounds, background signal, or other interference.
- PI** - **Proper Integration:** a peak with poor or inconsistent integration (e.g., excessive tail) was properly integrated manually.

L-WI-035/a-mi-10/00





Cust ID: B12BX1 B12BX1 B12BX1 VBLKGT VBLKGT BS

RFW#: 001 001 MS 001 MSD 01LVN145-MB1 01LVN145-MB1

Chlorobenzene	5 U	111 %	110 %	5 U	104 %
Ethylbenzene	5 U	5 U	5 U	5 U	1 J
Styrene	5 U	5 U	5 U	5 U	5 U
Xylene (total)	5 U	5 U	5 U	5 U	5 U

\*= Outside of EPA CLP QC limits.



Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B01-059-4		Page 1 of 1		
Collector Thomas, G/Watson, D.		Company Contact Todd, M.		Telephone No. (509)372-9631		Project Coordinator TRENT, SJ		Price Code 7N Data Turnaround 45 Days		
Project Designation 200-TW-1 & 2 - QC Sampling		Sampling Location T-26/200 W			SAF No. B01-059		Air Quality <input type="checkbox"/>			
Ice Chest No. <b>ERC-01-017</b>		Field Logbook No. EL-1518		COA B20TW1A44C		Method of Shipment Fed Ex				
Shipped To <b>TMA/RECRA</b>		Offsite Property No. <b>A010312</b>			Bill of Lading/Air Bill No. <b>423579525580</b>					
POSSIBLE SAMPLE HAZARDS/REMARKS										
Special Handling and/or Storage					Preservation		Cool 4C			
					Type of Container		aGs*			
					No. of Container(s)		1			
					Volume		40mL			
SAMPLE ANALYSIS					VOA - 8260A (TCL)					
Sample No.		Matrix *	Sample Date	Sample Time						
B12BX1		WATER	07/09/01	0200	X					
CHAIN OF POSSESSION					SPECIAL INSTRUCTIONS					
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		<b>TRIP BLANK for B12BX5 RUN 7/9/01</b> <b>B125X7</b>  <b>Samples stored in Ref.#1A at the 3728 Shipping Facility on 7/9/01. Collector not available to relinquish samples on 7/9/01 for shipment.</b>		<b>Matrix *</b> S=Soil SB=Soilment SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Times WI=Wipe L=Liquid V=Vegetation X=Other
Greg Thomas		07/09/01		REF. 1A		07/09/01				
K. Nielson		09/40		K. Nielson		07/10				
R. Nielson		7/9/01		Federal Express						
FED Ex		7-10-01 9:30		C. H. H. H.		7-10-01 9:30				
LABORATORY SECTION		Received By		Title		Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time				